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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/502,497

05/24/2005

Pascal Muller

5504-4PUS

8122

27799

7590

03/18/2008

COHEN, PONTANI, LIEBERMAN & PAVANE

551 FIFTH AVENUE

SUITE 1210

NEW YORK, NY 10176

EXAMINER

DRODGE, JOSEPH W

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/502,497	Applicant(s) MULLER ET AL.	
	Examiner Joseph W. Drodge	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Information Disclosure Statement: It is queried why the IDS of 7/22/2004 has a listing of references on a sheet labeled "Sheet 1 of 2" with no "Sheet 2 of 2" following.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 and various dependent claims "oxidation 11" is non-idiomatic.

The claims are replete with vague and indefinite terminology, including "preferably", "approximately".

In claim 13, "NaCl, water" is confusing.

In claim 20, "a previous extraction stage of the calcium present" is unclear as to what step of claim 1 is referenced, especially since claim 1 is silent as to presence of any calcium.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Junghanss et al patent 4,008,076 in view of Sefton et al patent 4,123,260. Junghanss discloses a process for selectively extracting and separating zinc, copper, iron and nickel from each other in effluents by steps including formation of chlorides from solution saturated with sodium or hydrogen chloride, hence chloride ions, forming complexes with ion exchange materials, oxidizing to form zinc and other metal oxides, and selectively eluting the various metals with sequential solvents or eluents. Column 6, line 39-column 7, line 5 are specific to obtaining of zinc by formation of chlorides and

The claims differ in requiring the ion exchange materials to be in the form of a resin. Sefton teaches selective separation of the same category of metals as Junghanss by process steps including chelating, precipitation and complex-forming or chelating steps, in which ion exchange material in the form of a resin is utilized. It would have been obvious to one of ordinary skill in the art to have utilized ion exchange material in the form of resin as taught by Sefton, in the process of Junghanss, since ion exchange resins can be readily regenerated and recycled/recovered. See in particular in this regard column 4, lines 46-57.

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Junghanss further disclose: the various transitional metals of claim 2 (Abstract)
; use of chloride-rich solutions for claims 3,4,6 and 7 including use of HCl and NaCl
(column 5, lines 23-34);
alkali precipitation agents for claims 7-9 (column 3, lines 64-67);
oxidation, desorption and extraction stages for claims 10,17 and 18 including use of
ammonia (column 7, lines 6-26);
dissociation stages to form different chlorides of zinc that are subsequently eluted for
claims 11-16 (column 6, lines 65-66);
electrolytic desorption for claim 19 (column 4, line 64);
extraction of calcium present for claim 20 (see column 5, line 67 regarding adding lime);
and addition of sulfuric acid for claim 21 (column 2, line 37).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kane et al patent 3,923,615 and Hazen et al patent 2,992,894 are of general interest regarding selective extraction and precipitation of zinc from other metals utilizing ion exchange and elution.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Roy Sample, can be reached at 571-272-1376. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

/Joseph W. Drodge/
Primary Examiner, Art Unit 1797